

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS D350-567 REV. D OR EARLIER
AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D350-567 REV. 1 OR EARLIER

REF CANADIAN STC: SH92-18

FAA STC: SH989NE

FAA STC: SH990NE

1.0 Purpose

The purpose of this service instruction is to add the D350-567-141 Close-out Kit, which is intended for customers wishing to operate their aircraft with the interior floor window removed. The D350-567-141 Floor Window Close-out Kit provides a barrier around the interior and exterior vertical reference floor window to prevent objects from falling into the aircraft controls when the interior floor window is removed as shown in Figure 1.

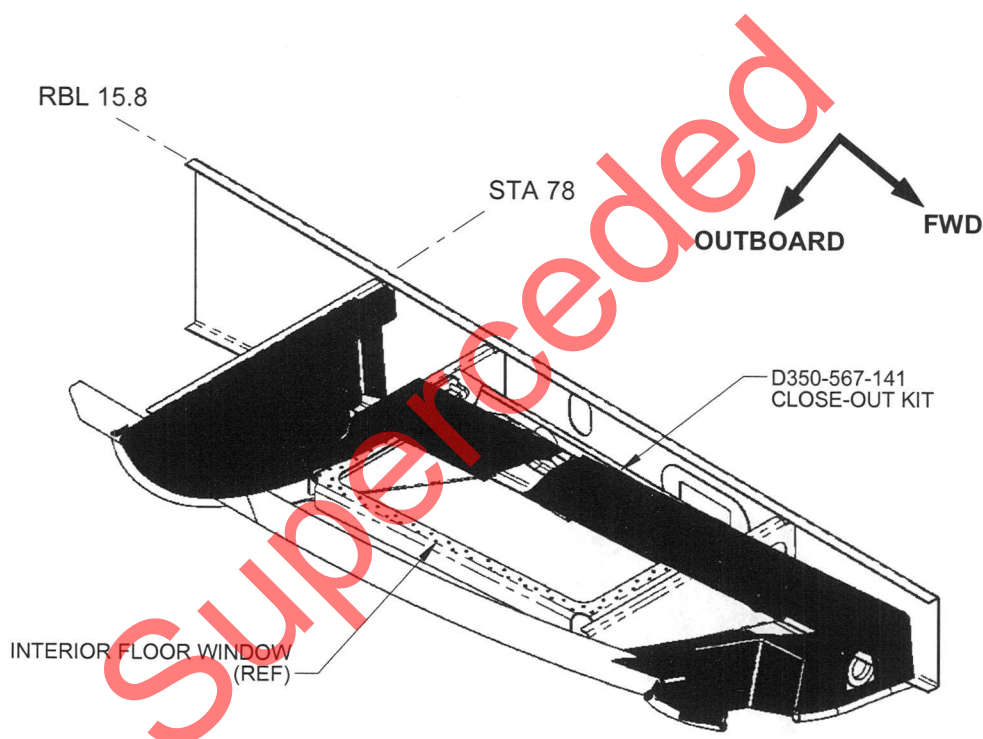


Figure 1. Floor Window Close-out Kit Installation

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DAO # 01-O-01

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CERT. NO.: SH92-18
ISSUE NO.: 6

A	NEW ISSUE	RF	12.01.09
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MFG. APPR.	N/A	DSI 9590	SHEET 1 OF 12
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	FLOOR WINDOW CLOSE-OUT KIT	NTS
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2.0 Part List

Qty -141	Part Number	Description
X	D350-567-141	FLOOR WINDOW CLOSE-OUT KIT
1	D3802-1-024	SEAL (24")
1	D4434-041	FWD BRACKET ASSEMBLY
1	D4434-047	COVER ASSEMBLY
1	D4435-045	T/R BELLCRANK COVER ASSEMBLY
2	D4435-9	BRACKET
1	D4436-041	AFT BRACKET ASSEMBLY
1	D4441-1-240	RUBBER SEAL (24")
7	AN3-3A	BOLT
9	AN525-632R6	SCREW
2	AN525-10R6	SCREW
9	MS21042L06	NUT (OR MS21042-06)
5	MS21042L3	NUT (OR MS21042-3)
2	MS21059L3	NUTPLATE
12	NAS1149F0332P	WASHER (AN960-10L)
9	NAS1149FN616P	WASHER (OR AN960-6L)

3.0 Weight and Balance

The following is the net weight increase associated with the D350-567-141 Kit.

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D350-567-141	3.9 lb	17.9 in	69.8 in-lb	65.5 in	255.5 in-lb
Floor Window Close-out Kit	1.77 kg	0.45 m	0.80 m-kg	1.66 m	2.94 m-kg

4.0 Installation Procedure

Notes:

- Figure 2 shows the general arrangement and installation of the D350-567-141 Close-out Kit. The procedure that follows outlines the step-by-step procedures for installing the kit with reference photos from the initial installation.
- In conjunction with this modification, it is acceptable to remove the interior floor windows as applicable. Note that the structural reinforcement around the window opening is still required.
 - D350-567-115 — OK to remove D3295-041
 - D350-567-031 — OK to remove D3212-1
 - D350-567-011 — OK to remove D2214
 - D350-567-021 — OK to remove D2951
- It is acceptable to drill/trim the D350-567-141 Close-out Kit as required to improve fit.

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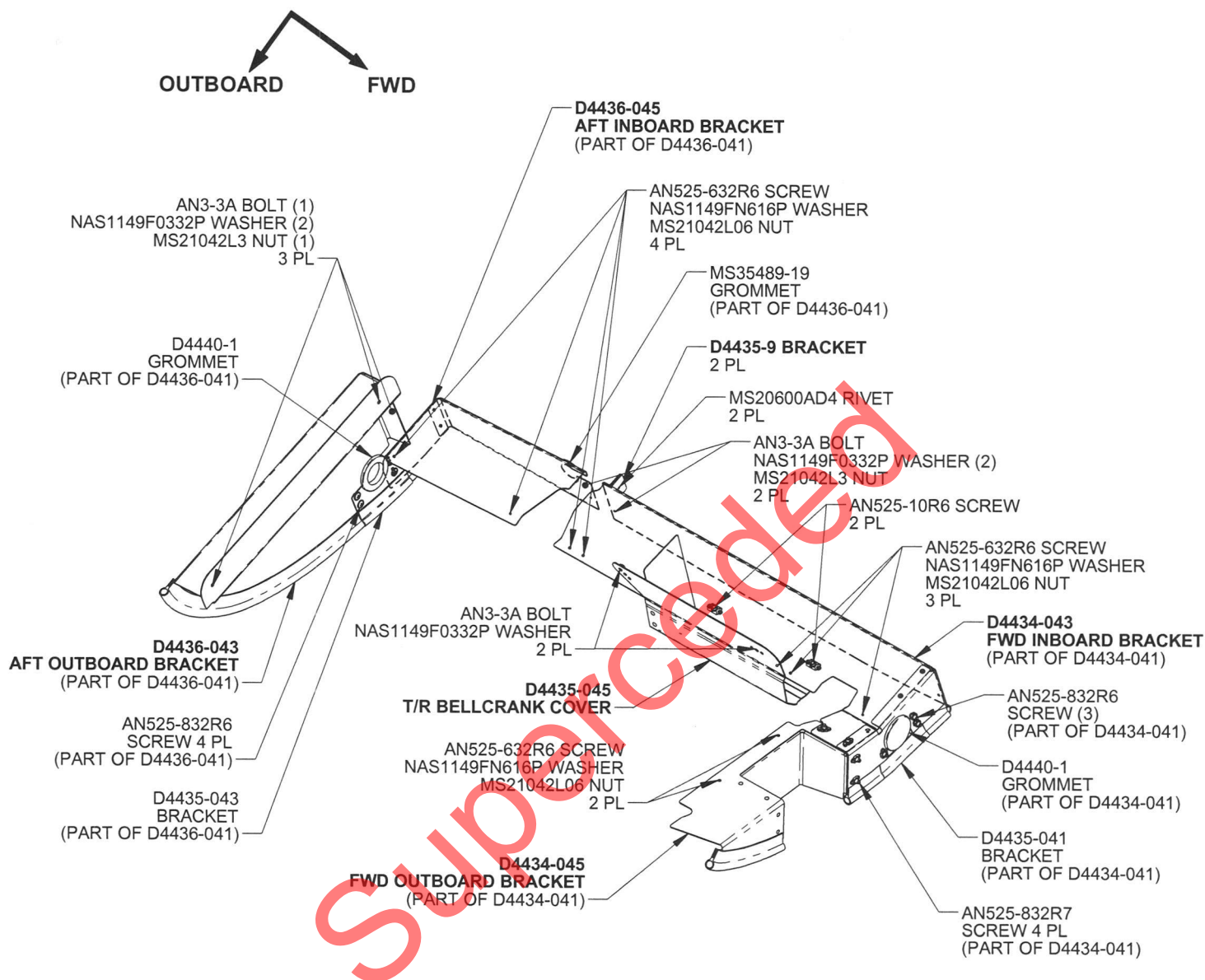


Figure 2. Floor Window Close-out Kit Installation

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DRAWING NO.

DSI 9590

REV. A

SHEET 3 OF 12

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FLOOR WINDOW CLOSE-OUT KIT NTS

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- 4.1 Temporarily install D4436-043 Aft Outboard Bracket and D4436-045 Aft Inboard Bracket using clecos and/or cleco clamps. Before drilling holes:
- Position the D4436-043 Aft Outboard Bracket so the flange contacts the main beam as shown in Figure 3.
 - Confirm that the D4436-043 Aft Outboard Bracket and beam angle are parallel as shown in Figure 4.
- 4.2 Temporarily install D4434-043 Fwd Inboard Bracket and D4434-045 Fwd Outboard Bracket using clecos and cleco clamps. Confirm there is no contact between D4436-045 Aft Inboard Bracket and D4434-043 Fwd Inboard Bracket and main beam gusset as shown in Figure 5.
- 4.3 If aircraft is equipped with Collective Circuit Breaker Board box trim D4434-043 Fwd Inboard Bracket as shown in Figure 14. Install D4434-047 Cover as shown in Figure 13. Note: Confirm the D4434-047 Cover fits over the Collective Circuit Breaker Board box. Adjust opening as required.
- 4.4 Drill off rivets holding plastic wire bundle stand offs. Transfer drill $\varnothing 0.144$ holes to D4436-045 Aft Inboard Bracket per Figure 6. Transfer drill 2 x $\varnothing 0.144$ holes to D4434-043 Fwd Inboard Bracket per Figure 7. Transfer drill 2 x $\varnothing 0.144$ holes for D4434-043 Fwd Inboard Bracket per Figure 8. Before drilling confirm the D4434-043 and D4436-045 brackets are flush with outboard edge of main beam flange. Assemble D4436-045 Aft Inboard Bracket and D4434-043 Fwd Inboard Bracket and wire bundle stand offs to main beam flange using AN525-632R6 screw, NAS1149FN616P washer and MS21042L06 nut.
- 4.5 Install D4436-043 Aft Outboard Bracket using AN3-3A bolt and NAS1149F0332P washer and MS21042L3 nut per Figure 9.
- 4.6 Remove 2 rivets holding RH heating plastic stand off as shown in Figure 10. Position the D4435-9 Brackets on the in/outboard sides of the cross beam and transfer drill 2 x $\varnothing 0.129$ holes from crossbeam to both D4435-9 Brackets. Install D4435-9 Brackets and RH heating plastic stand off using MS20600AD4 rivets or equivalent.
- 4.7 Drill a pilot hole from D4435-9 Bracket to the D4434-045 Fwd Inboard Bracket and D4436-045 Aft Inboard Bracket and open to $\varnothing 0.191$. Install AN3-3A bolt, NAS1149F0332P washer and MS21042L3 nut as shown in Figure 10. Be sure to maintain edge distance.
- 4.8 Transfer drill 2 x $\varnothing 0.144$ holes from crossbeam to D4434-045 Fwd Outboard Bracket if holes exist in crossbeam. If holes do not exist, drill 2 x $\varnothing 0.144$ holes at either end of D4434-045 bracket as shown in Figure 11. Install AN525-832R6 Screws, NAS1149FN816P washer and MS21042L08 nuts.
- 4.9 Align D4435-045 T/R Bellcrank Cover with existing holes in RH seat track lower frame and temporarily install using clecos and/or cleco clamps as shown in Figure 12.
- 4.10 Transfer drill 2 x $\varnothing 0.098$ holes from D4435-045 T/R Bellcrank Cover to D4434-043 Fwd Inboard Bracket. Open holes to $\varnothing 0.191$ and install MS21059L3 nut plate into D4434-043 Fwd Inboard Bracket as shown in Figure 12 and Figure 13. Install D4435-045 T/R Bellcrank Cover using AN525-10R6 screw, AN3-3A bolt and NAS1149F0332P washer per Figure 12 and Figure 13.
- 4.11 The D4440-1 grommets are provided to facilitate the routing of wiring harness thru the close-out kit as required. The wiring harness should be secure to the aircraft structure per AC 43.13.13-1B or AS350 Chapter 20.02.01.
- 4.12 Use the D3802-1-024 Seal to fill gaps between the brackets and the cowlings that are larger than 0.25 inch.
- 4.13 Perform travel/interference check of the flight controls to ensure there is no interference and all controls still have full travel.
- 4.14 Ensure there is a gap between the components of the D350-567-141 Close-out Kit and the aircraft structure so that the Close-out Kit does not chafe, interfere, or cause damage to the surrounding aircraft structure.

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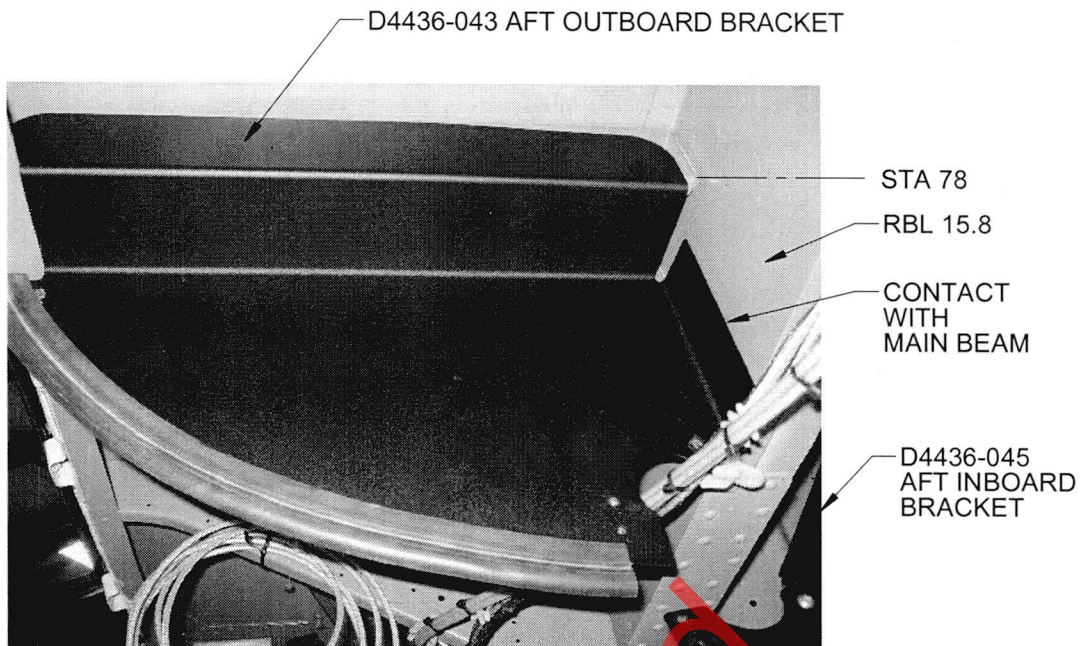


Figure 3. D4436-043 Aft Outboard Bracket Installation

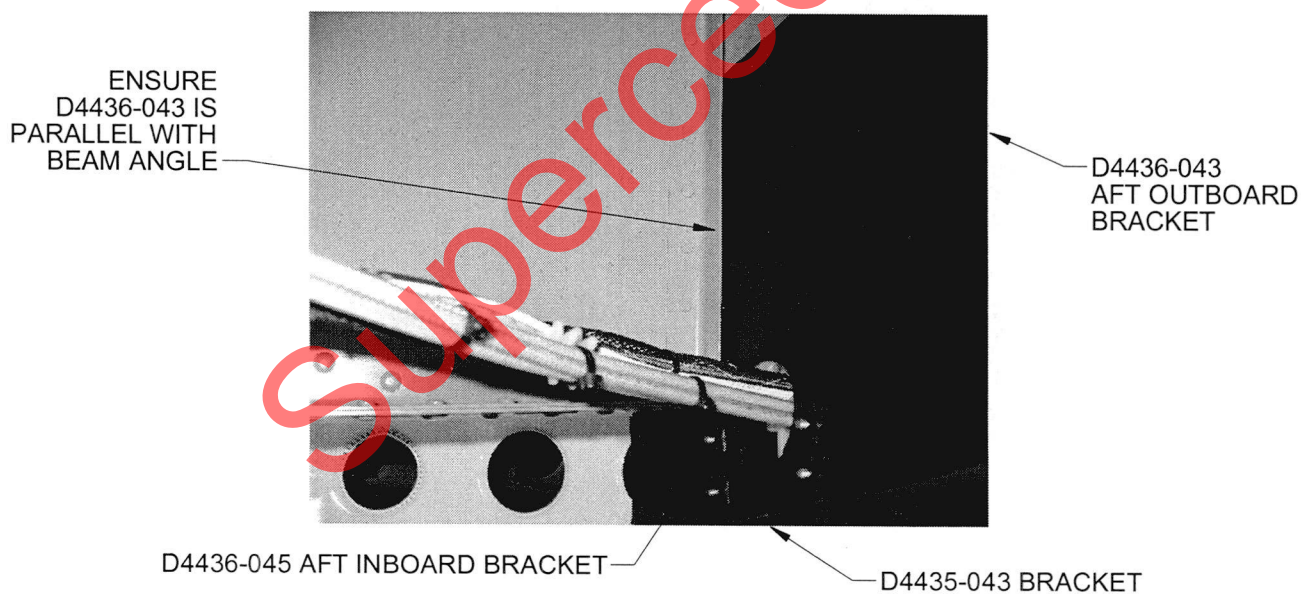


Figure 4. D4436-043 & D4435-043 Brackets Installation

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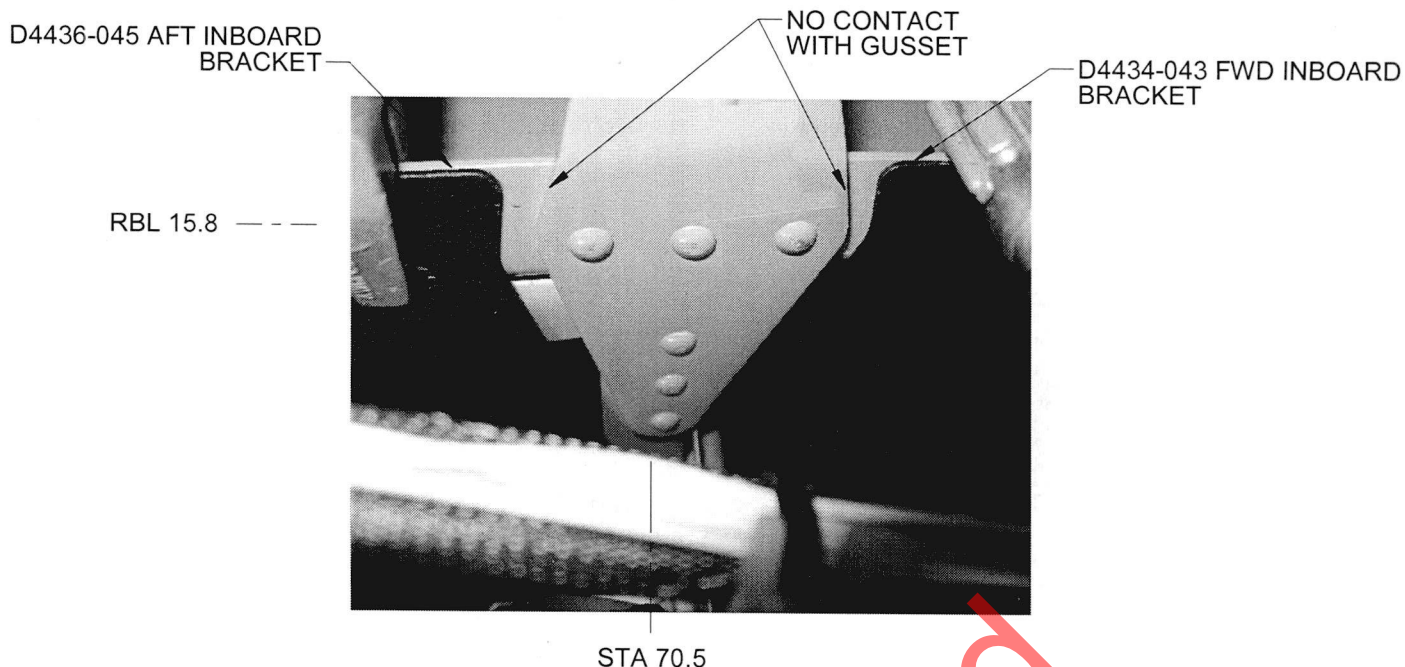


Figure 5. D4436-045 & D4434-043 Brackets Installation

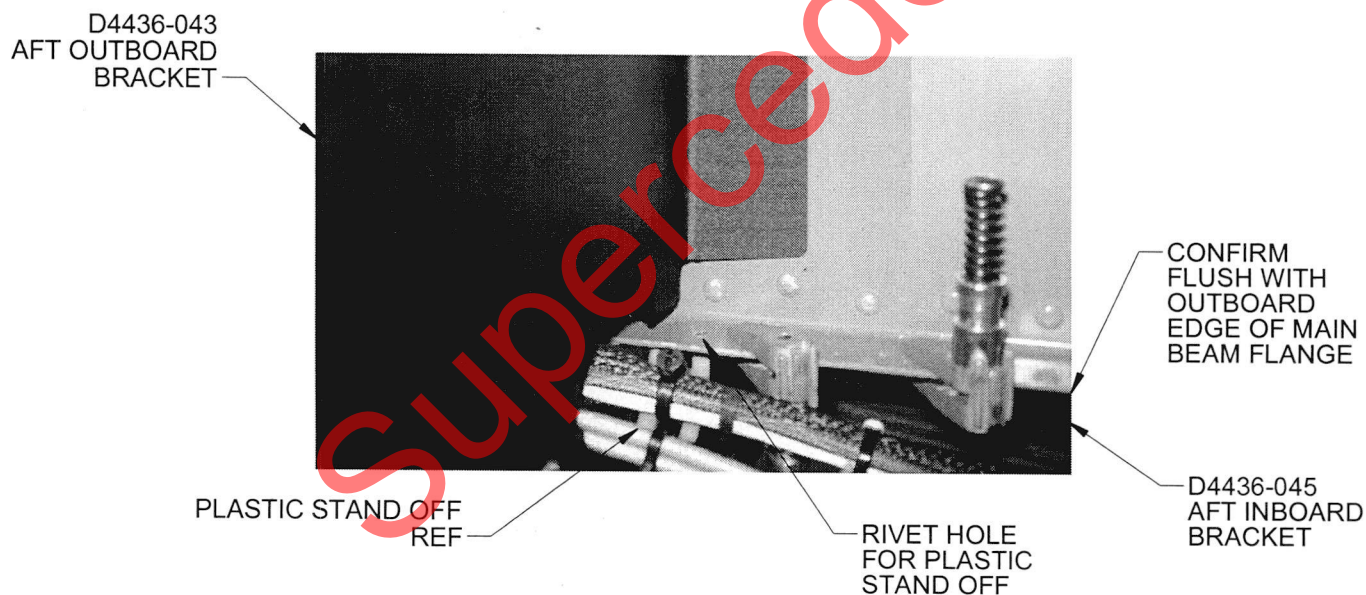


Figure 6. D4436-043 & D4436-045 Brackets Installation

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CONFIRM
FLUSH WITH
OUTBOARD
EDGE OF MAIN
BEAM FLANGE

RIVET HOLES
FOR PLASTIC
STAND OFF

--- RBL 15.8

D4436-045
AFT INBOARD
BRACKET

PLASTIC STAND OFF
REF

D4434-043 FWD INBOARD
BRACKET

Figure 7. D4434-043 & D4436-045 Brackets Installation

CONFIRM
FLUSH WITH
OUTBOARD
EDGE OF MAIN
BEAM FLANGE

RIVET HOLES
FOR PLASTIC
STAND OFF

--- RBL 15.8

D4434-043 FWD INBOARD
BRACKET

Figure 8. D4434-043 Fwd Inboard Bracket Installation

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INSTALL
D4436-043
AFT OUTBOARD BRACKET
USING
AN3-3A BOLT (1)
NAS1149F0332P WASHER (2)
MS21042L3 NUT (1)
3 PL



Figure 9. D4436-043 Aft Outboard Bracket Installation

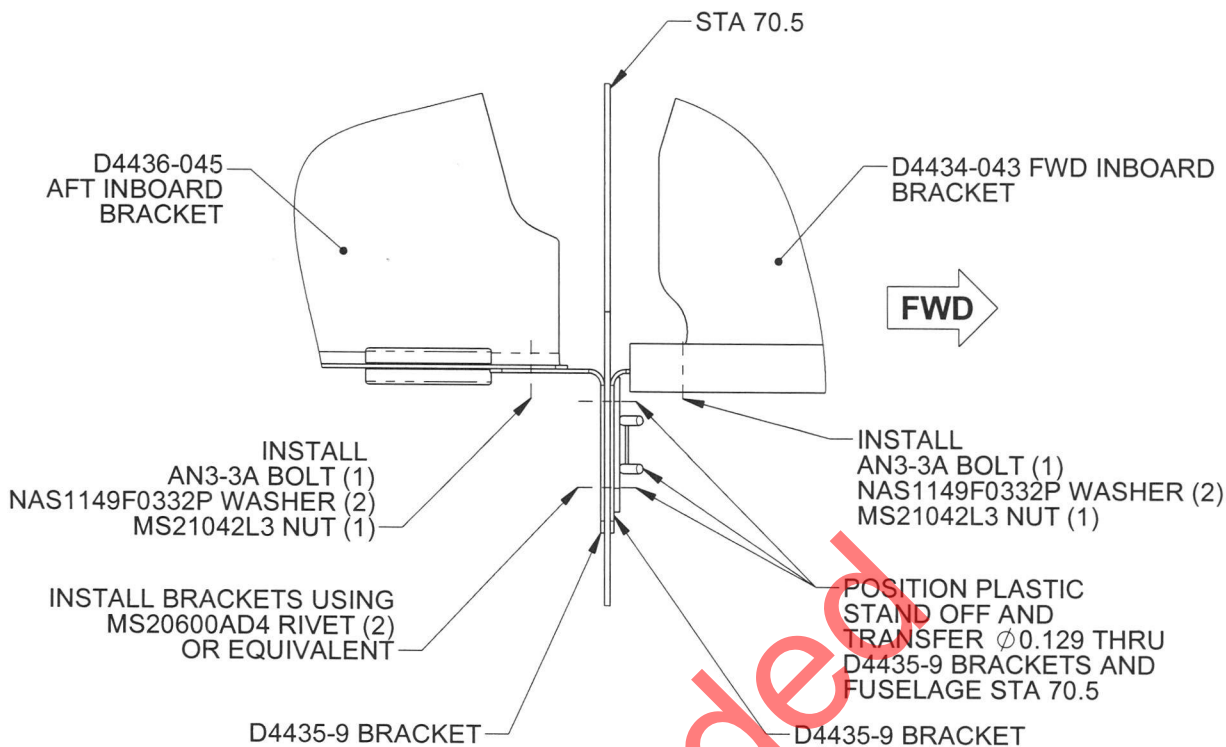
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LOOKING UP AT STA 70.5



Figure 10. D4434-043 and D4435-9 Brackets Installation

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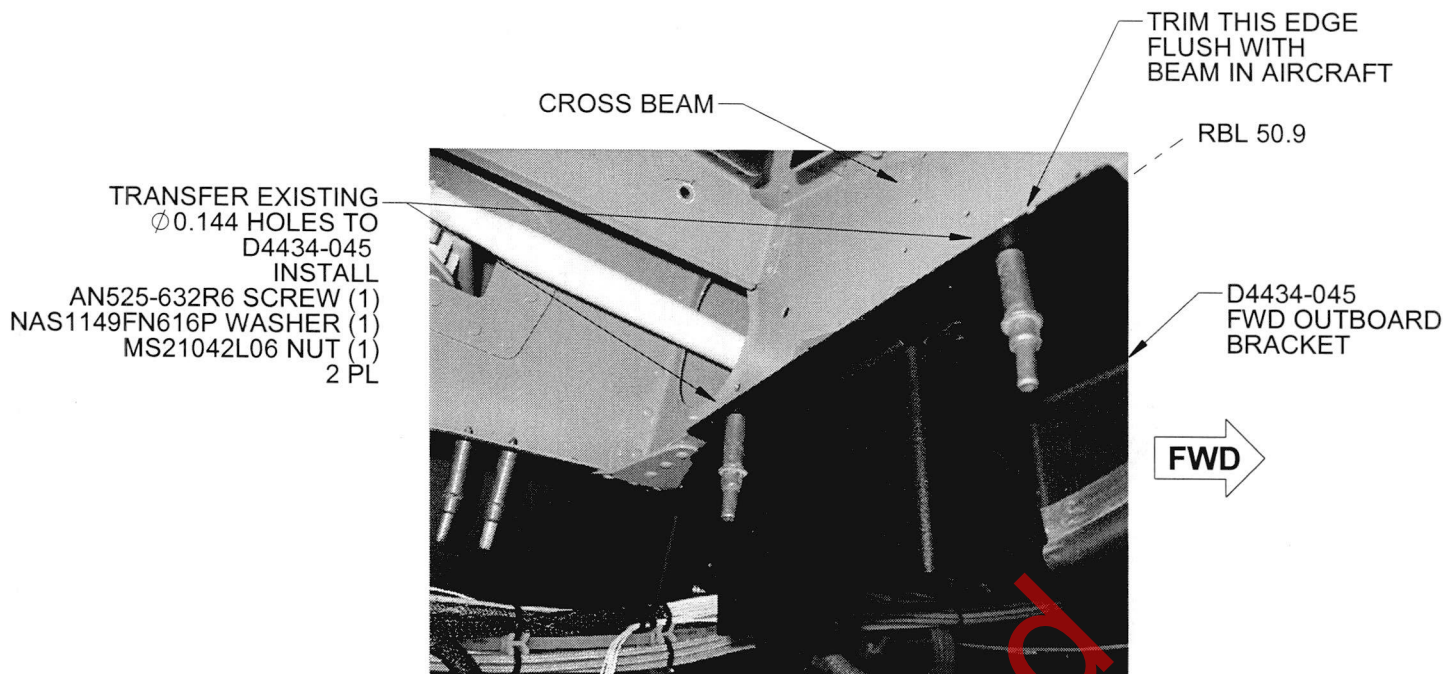


Figure 11. D4434-045 Bracket Installation

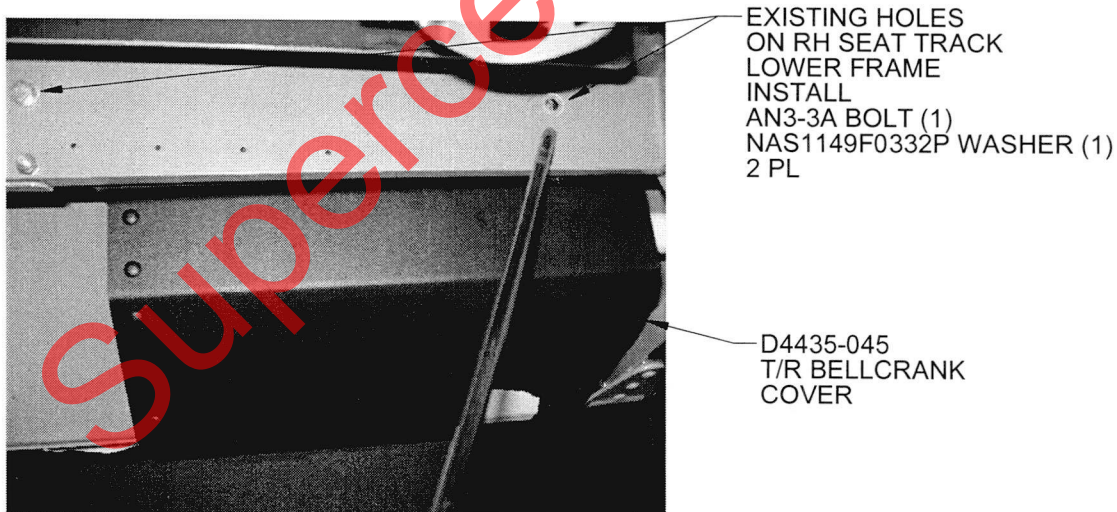


Figure 12. D4435-045 T/R Bellcrank Cover Installation

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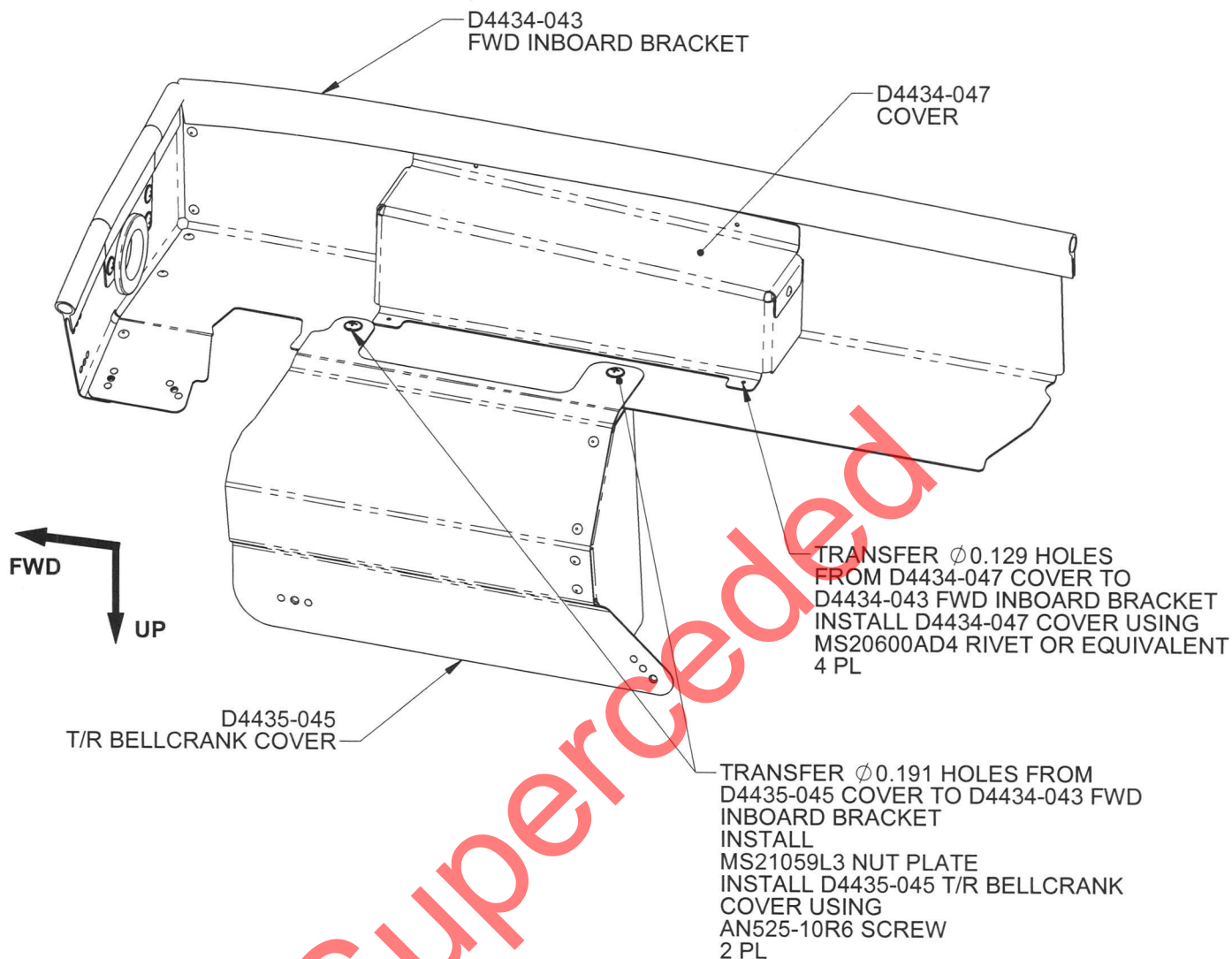


Figure 13. D4435-045 & D4434-047 Cover Installation

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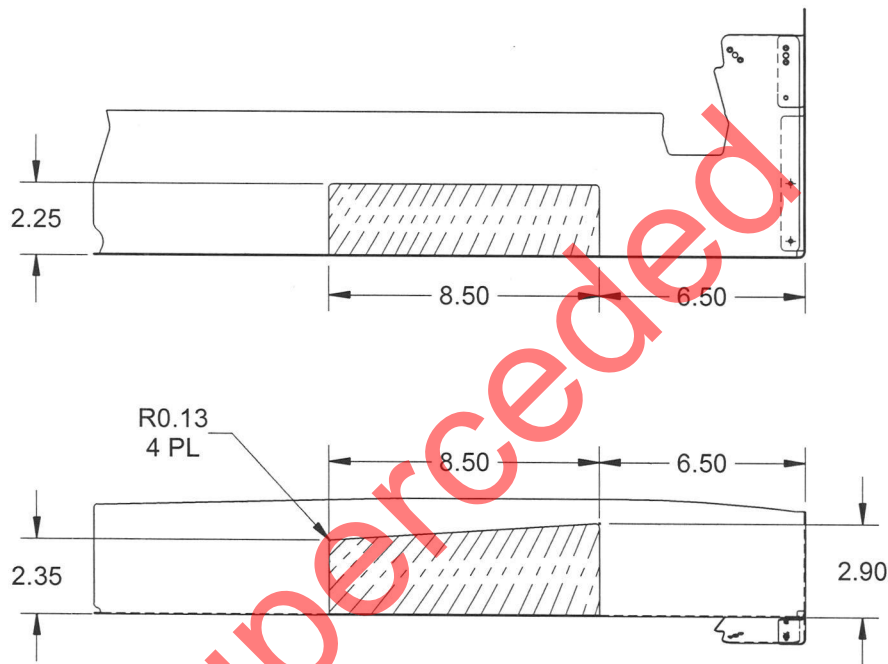
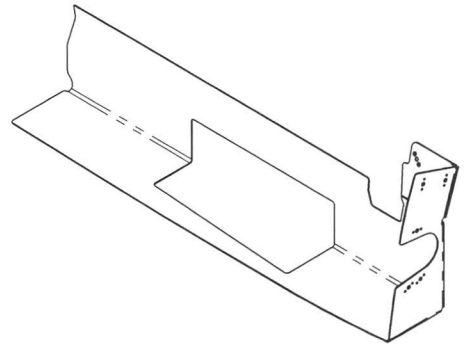


Figure 14. D4434-043 Fwd Inboard Bracket Cutout

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